

the more shallow canal leading to it. In the *Dinornis*, the breadth and depth of the condyles are equal; the outer condyle is the broadest, the inner one is the most prominent; their articular surfaces are so continuous as to leave no space answering to the intercondyloid space in the *Aptornis*, *Notornis*, &c. The bridge is situated nearer the inner side of the bone, is subtransverse, rather narrow, with a widely elliptical lower outlet opening above the inner condyle.

The *Gastornis* was a bird of the size of the Ostrich, but with more bulky proportions, and in that respect more resembling the *Dinornis*: it appears to have had nearer affinities with the wading order, and therein, perhaps, to the *Rallidæ*; but the modifications of its tibia indicate a genus of birds distinct from all previously known genera.

“Description of some Mammalian Fossils from the Red Crag of Suffolk.” By Prof. Owen, F.R.S., F.G.S.

The fossils described in this paper were referred by the author to the following genera and species:—*Rhinoceros*, a species nearly allied to, if not identical with, *Rh. Schleiermacheri*, Kaup; from crag-pits at Wolverston, Sutton, and Felixstow, Suffolk. *Tapirus priscus*, Kaup; from Sutton. *Sus palæochærus*, Kaup; from Sutton. *Sus antiquus*, Kaup; from Ramsholt, Suffolk. *Equus*: two species, one apparently *Eq. plicidens*, Owen; from Bawdsey, Suffolk. *Cervus dicranoceros*, Kaup; from Ipswich and Sutton. *Cervus megaceros*, from Felixstow. *Ursus*, sp. indet., less than *Ur. spelæus*. *Canis*, apparently *C. Lupus*. *Felis pardoides*, Owen; from Newbourn, Suffolk. *Mastodon longirostris*, Kaup; from Sutton, Felixstow, and Ipswich. *Ziphius longirostris*, Cuv. (*Dioplonodon Becanii*, Gervais); *Hoplocetus crassidens*, Gervais; *Balenodon affinis*, *Bal. definita*, *Bal. gibbosa*, *Bal. emarginata*, Owen; and remains of species of *Delphinus*, of the size of the Grampus.

The conclusion which the author deduced from the large proportion of miocene forms of mammalia, and the very great numerical superiority of individual fossil specimens from the Red Crag referable to miocene species, and from the admixture of these fossils with a few eocene and pleistocene species, was that the Red Crag was the *débris* of former tertiary strata of different periods, and, in a great proportion, of the miocene period.

MISCELLANEOUS.

The British Museum—its Catalogues and accessions in Zoology.

“It is with great pleasure,” said the Prince Charles Bonaparte, in presenting the Academy of Sciences of Paris with a copy of Dr. Gray’s recent ‘Catalogue of the Tortoises,’ “it is with great pleasure that I lay before you this new work on the Chelonian Reptiles, because it is a true model of what the catalogues of great museums ought to be, taking the science at its standing point, and furnishing figures of new or doubtful species and of such as have been ill represented. In one word, it is a work worthy of its author, of the national establish-

ment in which he presides over the Zoological Department, and, above all, of the Administrators or 'Trustees' under whose charge it is. These enlightened statesmen, raised above low intrigues and personal considerations, although imbued with a spirit of order and strict economy, know how to avoid parsimony when the advancement of science is in question. Of this, the publication of this fine book by order of these 'Trustees' is a fresh proof, and the thanks of the scientific world are due to them for it."

If there be any class of men to whom the old proverb, that "a prophet is without honour in his own country," may be more especially applied, it is undoubtedly to our British zoologists; for while plain Brown, Jones, and Robinson may bawl themselves hoarse without finding a hearer, the moment Professor Schafskopf or Herr von Windbeutel makes his appearance he is greeted with unanimous applause; every opinion he puts forward is treasured up as so much gospel; and although here and there a thorough John Bull may be found to stand up for the merits of his countrymen, most of us are as little inclined to abate one jot of our exclusive faith in foreign scientific literature, as was mine 'host of the Garter' to suspect the honesty of his German customers. Under these circumstances it is very gratifying to find that the continental *savans* themselves by no means treat the labours of our British zoologists with contempt, and we have thought it worth while to quote the above passage from Prince Charles Bonaparte's oration, as it serves to show the estimation in which one of a long series of works, but little known to many of our readers, is held by one who is certainly no mean authority in such matters.

The books here referred to are the Catalogues of the Zoological Collections in the British Museum, which have now been appearing in constantly increasing numbers for a period of twelve or thirteen years. The value of their contents has also partaken of this progress; for instead of the "Lists," containing merely the names of the species existing in the national collection, with a few of the most important synonyms, which constituted the earlier volumes, those recently published generally include all the described species of the group on which they treat, accompanied by a full synonymy and descriptions of the new species; whilst in many cases the characters of all the species, and those of the genera and other groups are given. This applies especially to the Catalogues prepared by Dr. Gray himself, which embrace a portion of the Mammalia (the *Cetacea*, *Pinnipedia*, and *Ruminantia*), the whole of the Reptiles with the exception of the Colubrine Snakes, and the Cartilaginous Fishes; but some of Mr. Walker's and Mr. Smith's recent Entomological Catalogues present the same feature. Many of them also are accompanied by plates illustrative of the characters of the new genera, or, as in Dr. Gray's Catalogues of Mammalia, of all the genera; and it is with a view to the more effective illustration of the subjects that these books have lately cast off the form of unpretending duodecimos, in which they originally appeared, and come out boldly as quartos. Such is the 'Catalogue of Chelonian Reptiles' referred to by Prince Bonaparte

in the above extract, which is illustrated by some admirable plates of Tortoises by Mr. G. H. Ford; and such is also the excellent Catalogue of the *Papilionidæ* not long since brought out by Mr. G. R. Gray, which contains coloured figures of the new species described. We must therefore echo His Imperial Highness's expression of thankfulness to the Trustees for placing within our reach, at a moderate price, such a mass of valuable zoological literature.

In connexion with this subject we may also call attention to the vast additions which have been made to the zoological collections in the Museum in the course of the last twenty years, but especially since 1840, as shown in the following table, derived from the Parliamentary returns, as this more than anything will serve to show, not only the energy displayed in the conduct of the Department, but also the abundance of materials at the disposal of the authors of the different catalogues to enable them to render their works as perfect as possible:—

Additions made to the Zoological Collections in the British Museum during the years 1836 to 1855 inclusive.

| | Vertebrata. | Insects and Crustacea. | Other Invertebrata. | Total. |
|-------|-------------|------------------------|---------------------|---------|
| 1836. | 302 | 1,755 | 248 | 2,305 |
| 1837. | 1923 | 233 | 4,779 | 6,935 |
| 1838. | 1088 | 1,807 | 803 | 3,698 |
| 1839. | 1019 | 7,049 | 1,558 | 9,626 |
| 1840. | 654 | 12,371 | 8,164 | 21,976 |
| 1841. | 1936 | 3,744 | 11,345 | 16,238 |
| 1842. | 2740 | 5,125 | 10,877 | 18,742 |
| 1843. | 4503 | 10,221 | 6,150 | 20,874 |
| 1844. | 3517 | 19,191 | 10,200 | 32,908 |
| 1845. | 5842 | 8,868 | 2,688 | 17,398 |
| 1846. | 4535 | 10,181 | 3,960 | 18,678 |
| 1847. | 2396 | 6,337 | 5,524 | 14,266 |
| 1848. | 2717 | 11,566 | 3,661 | 17,944 |
| 1849. | 1608 | 5,011 | 3,559 | 10,178 |
| 1850. | 2251 | 7,260 | 3,827 | 13,338 |
| 1851. | 2889 | 9,438 | 8,415 | 20,742 |
| 1852. | 2303 | 8,237 | 5,724 | 16,264 |
| 1853. | 1979 | 105,406 | 5,015 | 112,400 |
| 1854. | 903 | 9,663 | 13,847 | 24,413 |
| 1855. | 4865 | 15,173 | 4,340 | 24,378 |
| | | | | 422,301 |

Note on the Development of the Lampreys.

By M. SCHULTZE.

The author has examined the development of the ova of *Petromyzon Planeri*, which occurs commonly in a small brook near Berlin. The ova were artificially impregnated. The mature ova are white and